

We claim:

1. A process for extracting a natural organic component from organic material, comprising the steps of:

- (a) contacting the organic material in a vessel with a blend of tetrafluoroethane and at least one organic solvent to dissolve the natural organic component in the solvent blend;
- (b) removing the remaining organic material from the solution of the natural organic component and the solvent blend; and
- (c) removing the solvent blend to isolate a liquid, oily product containing the natural organic component.

Sub B3

2. The process of claim 1, wherein the organic solvent is selected from the group consisting of including acetone, butane, ethanol, ethylene chloride, hexane, isopropanol, methanol, methylene chloride, and propylene glycol.

3. The process of claim 1, wherein the solvent blend comprises from between about 60% to about 95% tetrafluoroethane.
4. The process of claim 3, wherein the solvent blend comprises tetrafluoroethane and at least two organic solvents.

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5. The process of claim 4, wherein the organic solvents are selected from the group consisting of including acetone, butane, hexane, and methanol.

6. The process of claim 5, wherein the solvent blend comprises between about 70% and about 85% tetrafluoroethane, between about 1% and about 25% acetone, and between about 1% and about 25% methanol.
7. The process of claim 3, wherein the solvent blend comprises between about 70% and about 95% tetrafluoroethane and the organic solvent is acetone.
8. The process of claim 3, wherein the solvent blend comprises between about 70% and about 90% tetrafluoroethane and the organic solvent is methanol.

9. The process of claim 3, wherein the solvent blend comprises between about 70% and about 90% tetrafluoroethane and the organic solvent is hexane.

10. The process of claim 1, wherein the natural organic component includes an antioxidant.

The process of claim 10, wherein the natural organic component includes organic molecules having polarity substantially similar to antioxidants.

12. The process of claim 1, wherein the step of removing the solvent blend includes allowing the tetrafluoroethane to be reclaimed

13. A process for extracting molecules having polarity ~~comparable to~~ ^{substantially similar} antioxidants from botanical material, comprising the steps of:

- (a) contacting the botanical material in a vessel with a blend of tetrafluoroethane and at least one organic solvent to dissolve the molecules in the solvent blend;
- (b) removing the remaining botanical material from the solution of the molecules and the solvent blend; and
- (c) removing the solvent blend to isolate a liquid, oily product containing the molecules.

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14.

A process for extracting a natural organic component from botanical material, comprising the steps of:

- (a) contacting the botanical material in a vessel with a blend of tetrafluoroethane and at least one organic solvent to dissolve the natural organic component in the solvent blend;
- (b) removing the remaining botanical material from the solution of the natural organic component and the solvent blend; and
- (c) removing the solvent blend to isolate a liquid, oily product containing the natural organic component which has antioxidant activity that is improved over a natural component extracted in the absence of the organic solvent.

15.

The process of claim 14, wherein the liquid, oily product is ~~readily~~ ^{readily +} soluble in an edible oil.

16.

The process of claim 14, wherein the botanical material is at least one species selected from the family Labiatae.

17.

The process of claim 14, wherein the botanical material is *Rosemarinus officinalis*.

18. A preservative for foods and animal feedstuffs, comprising a mixture of the liquid, oily product obtained from the process of claim 14 and an edible oil.

~~Component
from method~~

19. An orally administered antioxidant for humans and animals, comprising a mixture of the liquid, oily product obtained from the process of claim 14 and an edible carrier.

